

Appl. No. 10/708,406  
Response Dated December 11, 2006  
Reply to Office Action Dated September 15, 2006

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**REMARKS/ARGUMENTS**

The present application includes claims 1-38. In the outstanding Office Action, claims 1-38 were rejected. In this response, claims 36 is amended, and claim 37 is cancelled. Reconsideration and allowance of claims 1-36 and 38 are respectfully requested in view of the above amendments and the following remarks.

**Rejections under 35 U.S.C. § 101**

Claims 1-5, 16, 17, 19-23, and 33-35 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Specifically, the Examiner stated that the invention is directed to a judicial exception to § 101, and is not directed to a practical application of such judicial exception because the claim does not require any physical transformation. The Examiner specifically stated that "automatically adjusting" and "automatically adjust" are not considered to produce a concrete, useful, or tangible result. The applicant respectfully disagrees.

Claim 1 is a method claim that recites "automatically adjusting the wellsite setup from the offsite center based on the analysis of the wellsite parameters." This is the very essence of a concrete, useful, or tangible result. The specification states that the wellsite setup may be selectively adjusted to control the drilling operation. Parameters such as mud flow rate and drilling forces, among many others, may be controlled by adjusting the wellsite setup (see specification at para. 47-48). Thus, the recited step of automatically adjusting a wellsite setup embodies a concrete, useful and tangible result because it has a physical effect on the drilling process.

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Independent claims 19 and 33 include similar limitations, and they are directed to statutory subject matter for at least the same reasons.

Thus, independent claims 1, 19, and 33 are directed to statutory subject matter. Dependent claims are similarly directed to statutory subject matter for at least the same reasons. Accordingly, withdrawal of the rejection of claims 1-5, 16, 17, 19-23, and 33-35 under 35 U.S.C. § 101 is respectfully requested.

#### **Rejections under 35 U.S.C § 102(b)**

Claims 36 and 38 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,794,534 issued to Milheim ("Milheim"). In this response, claim 36 is amended to include the limitations of claim 37. To the extent this rejection still applies, it is respectfully traversed because Milheim does not show all of the limitations recited in the claim 36.

Claim 36, as amended, recites the limitation of transmitting a drilling command from the offsite control center to a surface control unit and automatically transmitting the drilling command from the surface control unit to the downhole drilling tool. Milehim, which discloses human intervention at the wellsite, does not anticipate claim 36, and claim 36 is allowable over Milheim. Dependent claim 38 is allowable for at least the same reasons. Accordingly, withdrawal of the rejection of claims 36 and 38 is respectfully requested.

#### **Rejections under 35 U.S.C § 103**

Claims 1-10, 15-29, 32-35, and 37 were rejected under 35 U.S.C. § 103 as being unpatentable over the combination of Milheim in view of U.S. Patent No. 6,456,902 issued to

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Streetman ("Streetman"). The Applicant respectfully traverses this rejection because (1) Milheim and Streetman are not properly combinable references; and (2) the combination of Milheim and Streetman does not teach all of the limitations in the claims.

Obviousness under Section 103 is based on four factual inquiries: (1) the scope and content of the prior art; (2) the differences between the claims and the prior art; (3) the level of ordinary skill in the relevant art; and (4) secondary considerations of non-obviousness. *B.F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d 1577, 1582 (Fed. Cir. 1996). "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP § 2143.03 (quoting *In re Royka*, 409 F.2d 981 (C.C.P.A. 1974)).

#### Non-Analogous Art

"The scope of the prior art has been defined as that 'reasonably pertinent to the particular problem with which the inventor was involved.'" *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1535 (Fed. Cir. 1983) (quoting *In re Wood*, 599 F.2d 1032, 1036 (C.C.P.A. 1979)). "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the invention was concerned." MPEP § 2141.01(a)(I) (quoting *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1986)).

Streetman discloses a system for a on-demand control of fluids in a production well, that is, a well from which hydrocarbon fluids are being produced and not drilled (see col. 1, ll. 13-21). A production well has already been drilled, and no more drilling is taking place. The production well control taught in Streetman is completely different from the far more demanding

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task of controlling a drilling operation. Thus, Streetman is not in the applicant's field of endeavor and it is not concerned with the same problem, namely the control of a drilling operation.

#### Motivation to Combine

Section 103 states that a patent may not be obtained if the invention would have been obvious "at the time the invention was made." It is this phrase that guards against entry into the "tempting but forbidden zone of hindsight." *In re Dembiczak*, 175 F.3d 994, 998-99 (Fed. Cir. 1999) (quoting *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 873 (Fed. Cir. 1985)). "[T]he best defense against the subtle but powerful attraction of hindsight-based obviousness analysis is a rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." *Id.* at 999. "Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability — the essence of hindsight." *Id.* It is for this reason that the invention must be viewed not with the blueprint drawn by the inventor, but in the state of the art at the time the invention was made. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138 (Fed. Cir. 1985).

The evidence of a suggestion, teaching, or motivation to combine references may come from the references themselves, the knowledge of a person having ordinary skill in the art, or the nature of the problem to be solved. *In re Dembiczak*, 175 F.3d at 999.

There exists no motivation to combine Streetman with Milheim. There is no teaching in either reference that Milheim, which is directed to using a predictive simulation while drilling a

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well, should be combined with Streetman, which is concerned with controlling a production well where no drilling is taking place. Streetman may not be properly combined with Milheim.

Thus, the combination of Milheim and Streetman constitutes impermissible hindsight, and may not be used in a rejection. Accordingly, withdrawal of the rejection of claims 1-10, 15-29, 32-35, and 37 under 35 U.S.C. § 103(a) is respectfully requested.

Combination does not show all element

As discussed above, Milheim does not disclose automatically adjusting a wellsite setup from an offsite center. Streetman does not make up for this deficiency.

Streetman discloses a system for a on-demand control of fluids in a production well, that is, a well from which hydrocarbon fluids are being produced and not drilled (see col. 1, ll. 13-21). A production well has already been drilled, and no more drilling is taking place. Thus, Streetman cannot teach or suggest automatically adjusting wellsite parameters in the process of drilling a well, and independent claims 1, 19, and 33 are patentable over the combination of Milheim and Streetman. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of the rejection of claims 1-10, 15-29, 32-35, and 37 under 35 U.S.C. § 103(a) is respectfully requested.

Rejections Based on Milheim and Alverado

Claims 11-14, 30, and 31 were rejected under 35 U.S.C. § 103 as being unpatentable over Milheim in view of U.S. Patent No. 5,864,772 issued to ("Alverado"). Independent claims 1 and 19, from which claims 11-14, 30 and 31 depend, have been shown to be patentable over the combination of Milheim and Streetman because the combination does not teach or suggest

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automatically adjusting a wellsite setup from an offsite control center. Alverado does not make up for this deficiency.

Alverado teaches techniques for transmitting acquired data in near real time at a remote location. Alvarado does not teach or suggest automatically adjusting a wellsite setup or making adjustments from an offsite center. In fact, Alvarado fails to even contemplate any type of communication or action from the offsite center to the wellsite. Moreover, Alvarado relates to a wireline tool, not a drilling tool, and does not teach or suggest anything related drilling a wellbore.

Thus, claims 1 and 19 are patentable over the combination of Milheim and Alverado. Dependent claims 11-14, 30, and 31 are allowable for at least the same reasons. Accordingly, withdrawal of the rejection of claims 11-14, 30, and 31 under § 103(a) is respectfully requested.

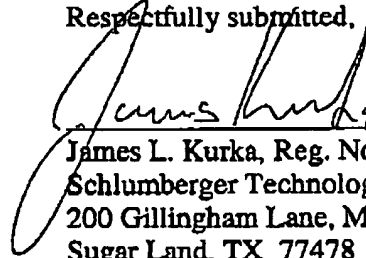
### Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Applicant believes this reply to be fully responsive to all outstanding issues and place this application in condition for allowance. If this belief is incorrect, or other issues arise, do not hesitate to contact the undersigned at the telephone number listed below. Please apply any charges not covered or any credits, to Deposit Account 19-0610 (Reference Number 19.0372).

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Respectfully submitted,



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